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Notice of Allowability

Application No.

10/700,832

Examiner

Hai C. Pham

Applicant(s)

NARAYAN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 02/27/06.
2. ☒ The allowed claim(s) is/are 1-6,9-25 and 28-55.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

IN THE CLAIM:

Claim 36:

- Line 1, changed "36" to --35--.

NOTE: The above amendment to claim 36 only corrects a minor typographical error regarding the dependency of claim 36, which cannot be dependent from itself but from claim 35. The amendment as such is not deemed necessary to obtain prior approval from the Applicants.

Reasons For Allowance

2. The following is an examiner's statement of reasons for allowance: Claims 1, 9, 16, 30, 35, 45 and 50 are patentable over the prior art patents and printed publications because of the specific configuration of the multichannel print head, which comprises an illumination array of light emitting diode light sources fitted into a housing at a first position, a lens array comprising a plurality of compound lenses fitted into said housing

at a second position, each compound lens comprising a plurality of aspheric surfaces, and a light-guiding array of uniformizer elements, arranged within a corresponding array of cavities formed within the housing and extended between the first position and the second position, and wherein for each pixel exposed on the photosensitive medium, a single light source in the illumination array provides light into a single corresponding uniformizer element in the light-guiding array, which directs light to a corresponding lens of the lens array. Claim 37 is a method claim for scanning a photosensitive medium using the multichannel print head having the above-mentioned configuration. The combined limitations as currently claimed in each of the above claims are not taught by the prior art of record alone or in combination.

Claims 40 and 42 are patentable over the prior art patents and printed publications, the claims recite a method for manufacturing a multichannel printhead having the above-mentioned configuration, the method comprising forming an illumination array of LED light sources on a single substrate, forming a lens array comprising a plurality of compound lenses, each said compound lens comprising a plurality of aspheric surfaces, forming a light guiding array of uniformizer elements, arranged within a corresponding array of cavities formed within a housing, forming a slot within said housing, said slot perpendicular to said light guiding array and at one end of said light guiding array, and aligning, in said slot, said illumination array with said light guiding array, whereby each said LED light source is aligned with one of said cavities, and forming a seat at the output side of said housing, said seat parallel to said slot and at the opposition end of said light guiding array from said slot, and aligning said lens

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array in said seat, whereby each lens in said plurality of lenses is aligned with one of said cavities. The combined limitations as currently claimed are not taught by the prior art of record alone or in combination.

Claims 2-6, 10-15, 17-25, 28-29, 31-34, 36, 38-39, 41, 43-44, 46-49 and 51-55 are allowed because they are directly or indirectly dependent from the above-mentioned claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM
PRIMARY EXAMINER

May 5, 2006